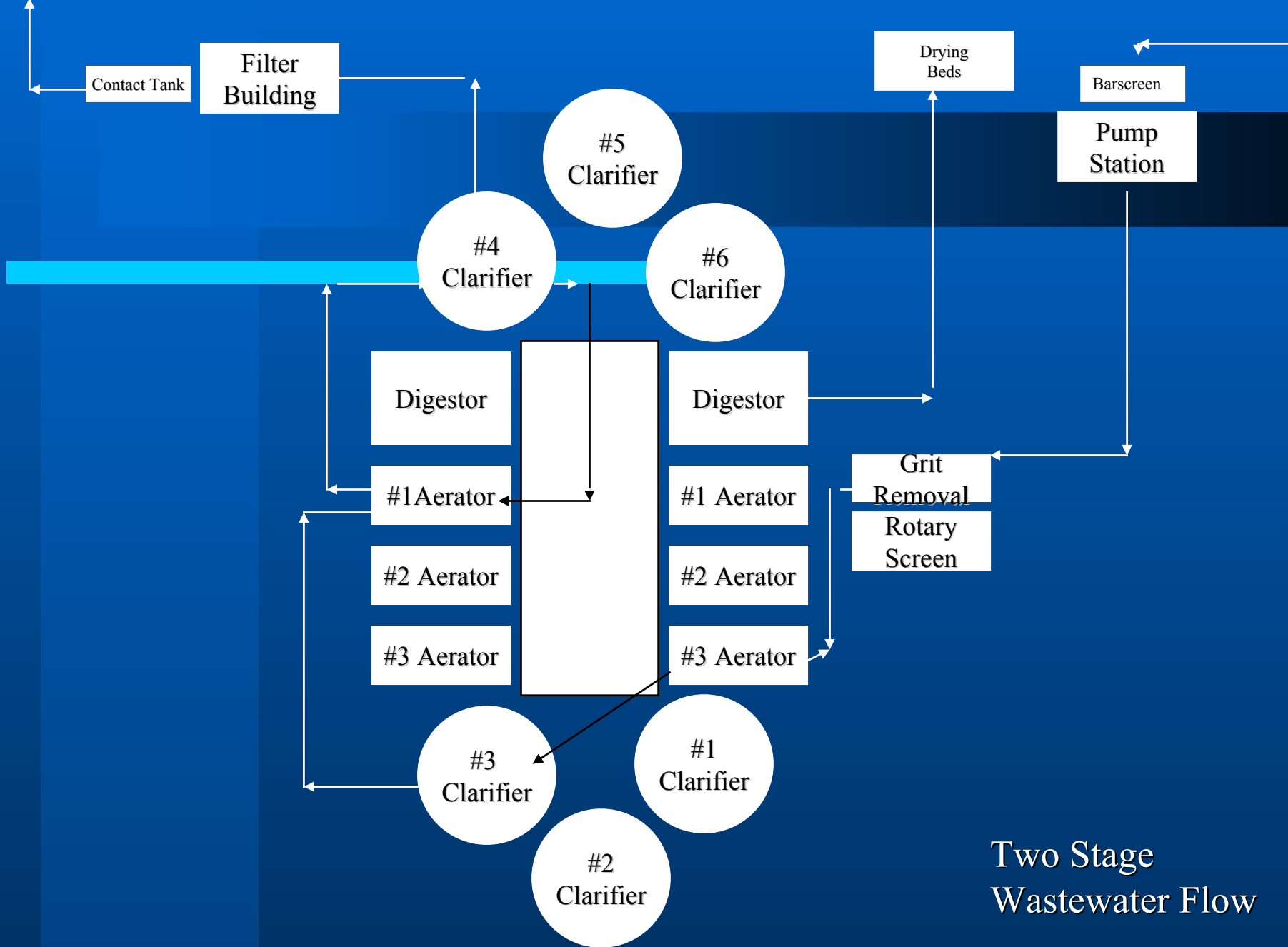


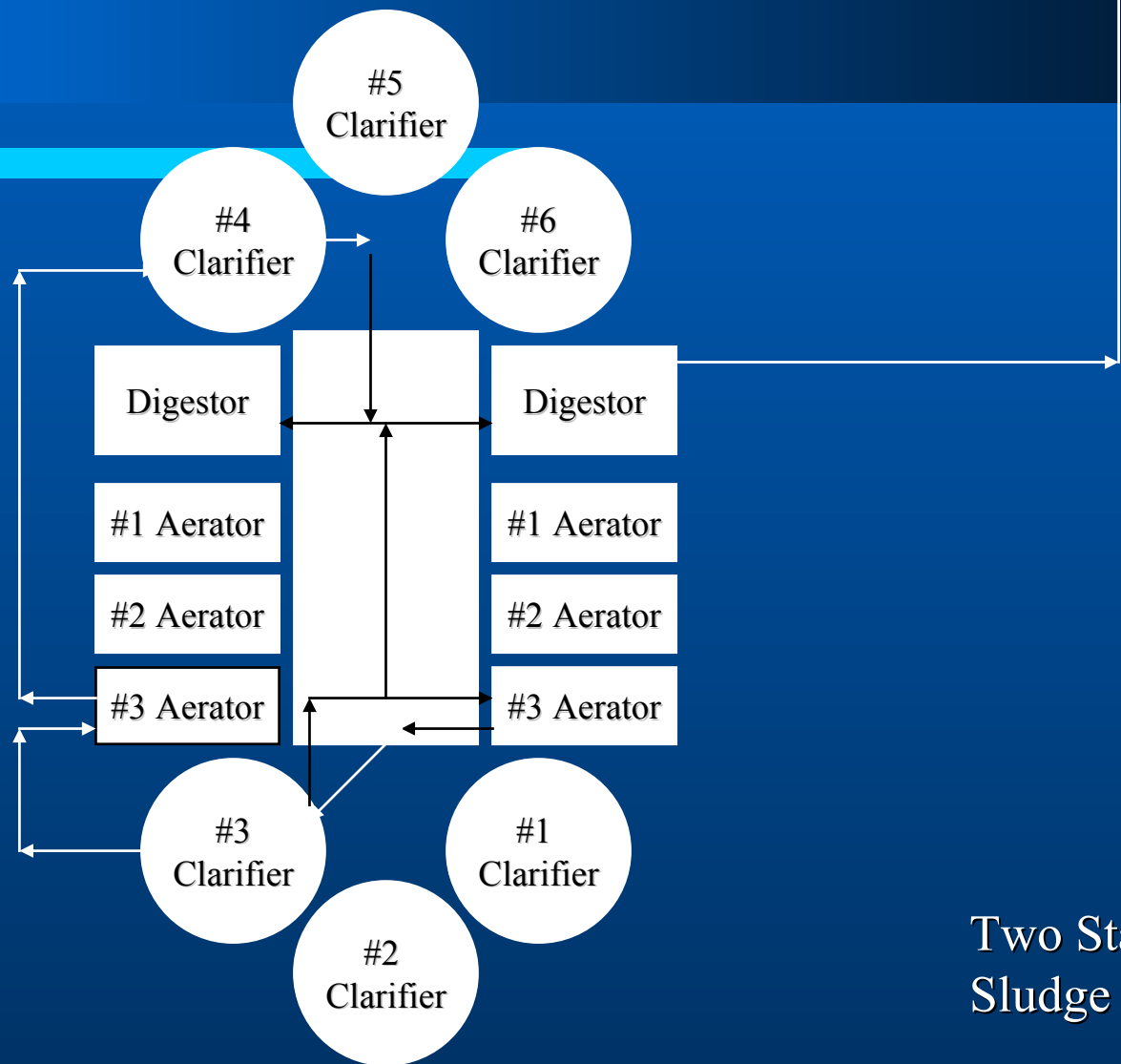
Dillman Road WWTP

City of Bloomington Utilities

City Of Bloomington Utilities WWTP







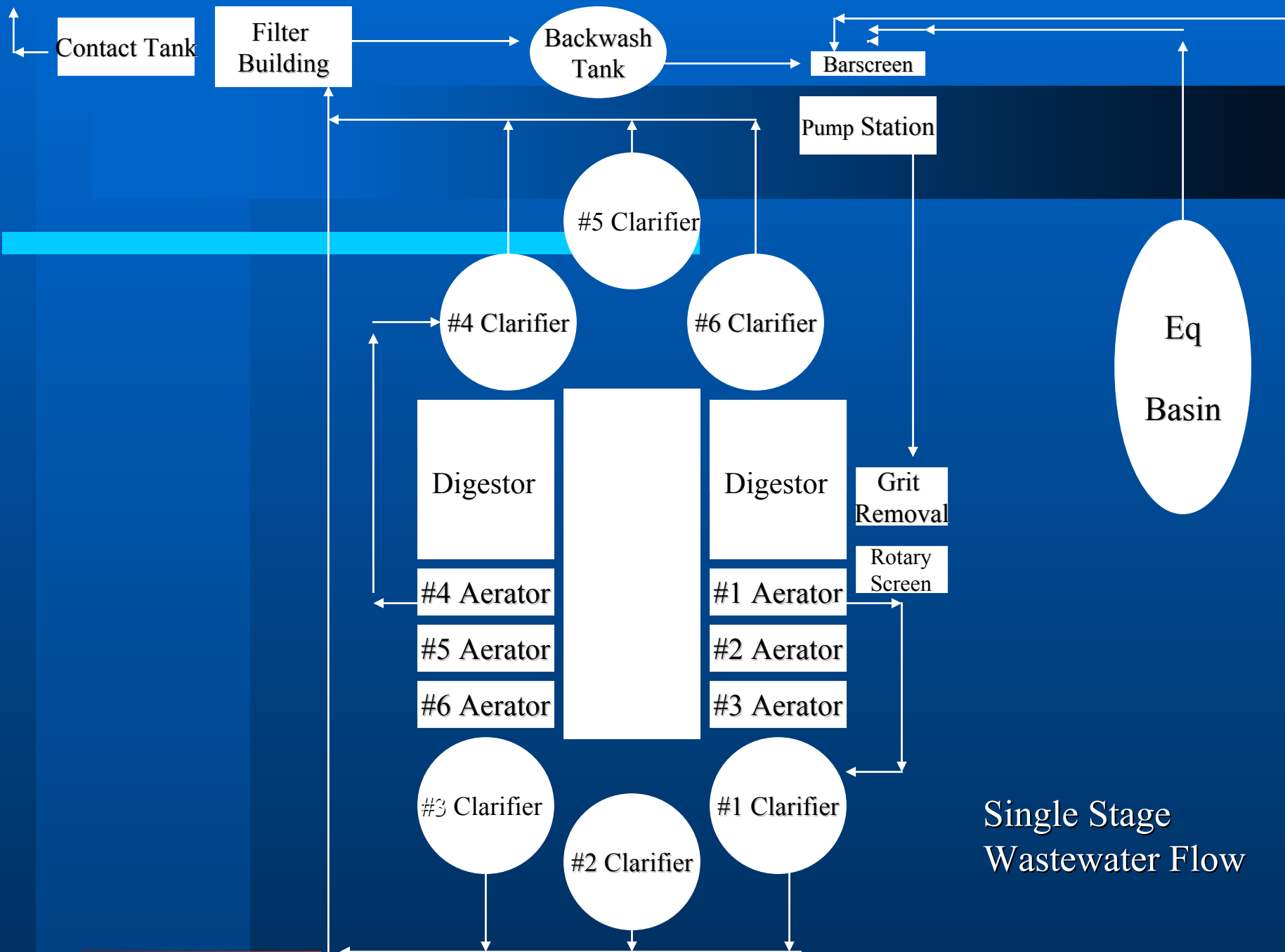
Two Stage
Sludge Flow

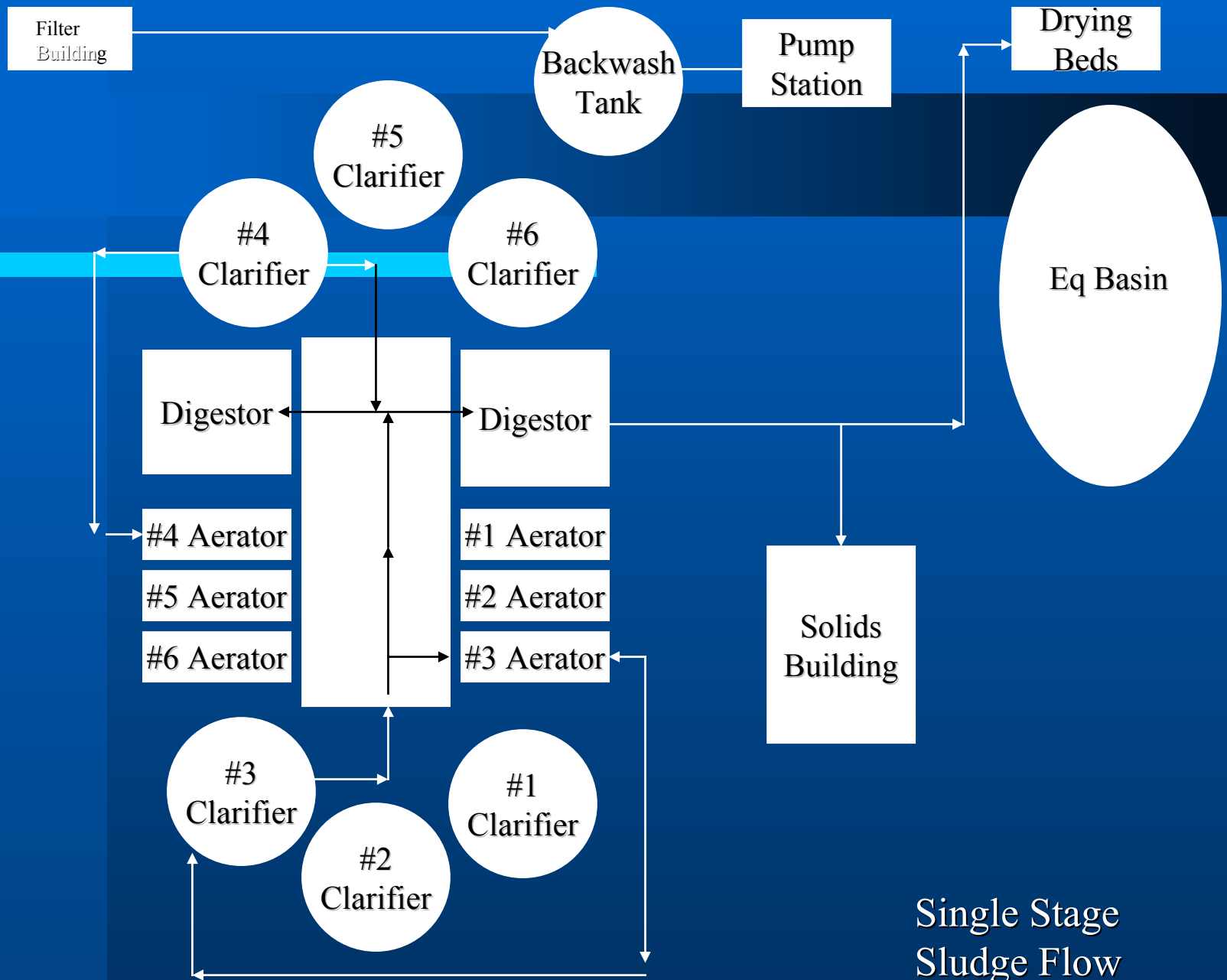
Project Goals

- Equalization basin
- Equalization basin pumps
- Solids belt presses
- Solids storage area
- Convert plant from two stage activated sludge system to single stage activated Sludge system
- SCADA system for plant operations

Equalization Basin

- Wet weather procedures
- Hydraulic flows to plant
- Maintain more control of plant process





Area Of Seven Acres, With A Holding
Capacity Of Forty Two Million Gallons



Four Aerators At Various Locations In EQ Basin For Mixing



Equalization Basin Aerators

- For moving water around
- Keep oxygen in the water
- Keeps from becoming septic until treatment

Two EQ Pumps



Generator Building



Two Stage Aeration



Two Stage To Single Stage Conversion



Single Stage Aerator



Process Air Blowers And Tunnel Area



6 Single Stage Aeration Basins



Polymer Feed System

- Added to aeration effluents
- Aids in settling of solids

Polymer Feed System



- Alum Feed System

Used in Removing Phosphorus
Also Another Solids Settling Aid

Alum Feed Pump



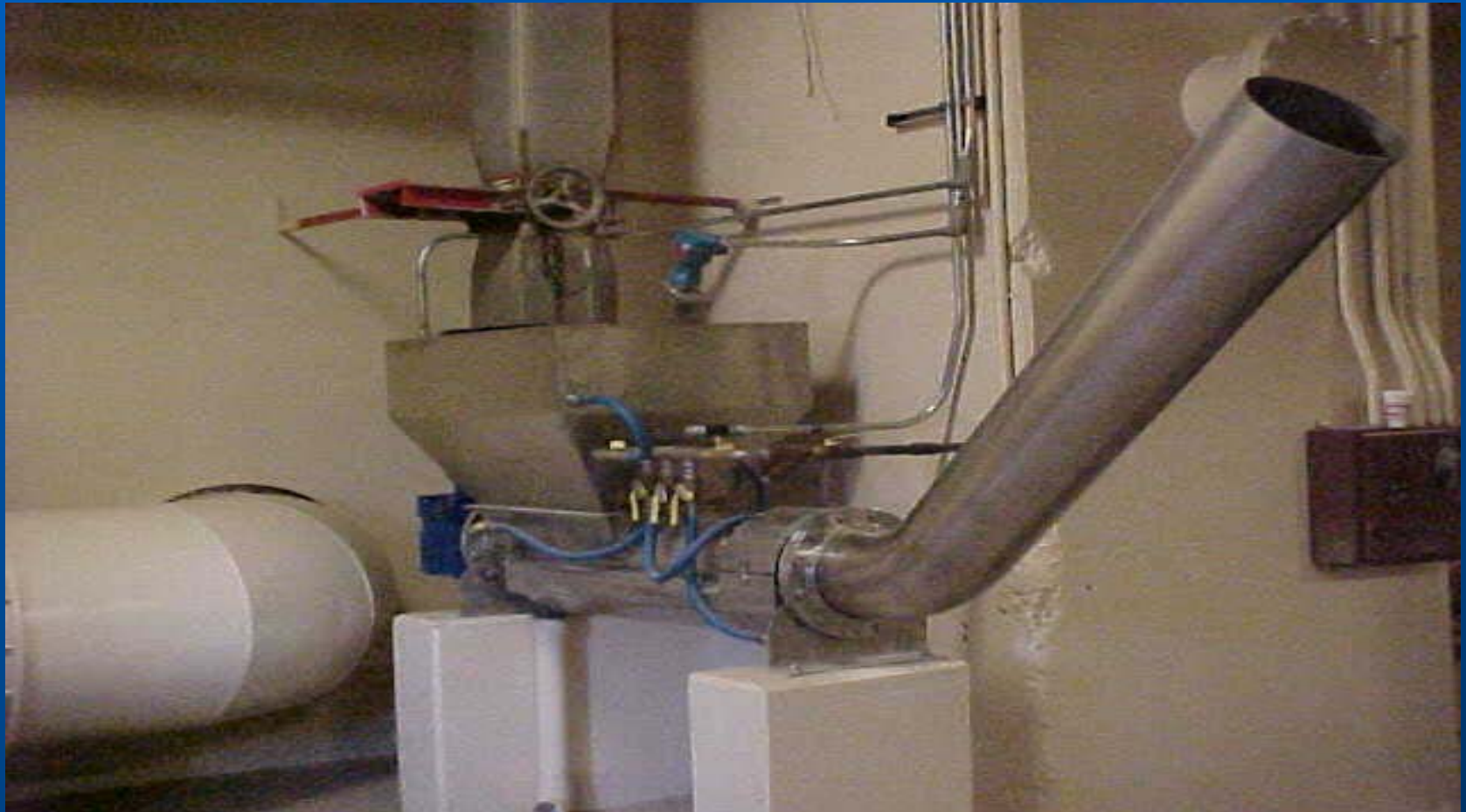
Six Clarifiers



Clarifier Effluent Piping



Rotary Screen Compactor



New Piping And RAS Meters



Ras Pumping

- **Return rate based on incoming flows**
- **Around 15% return rate**

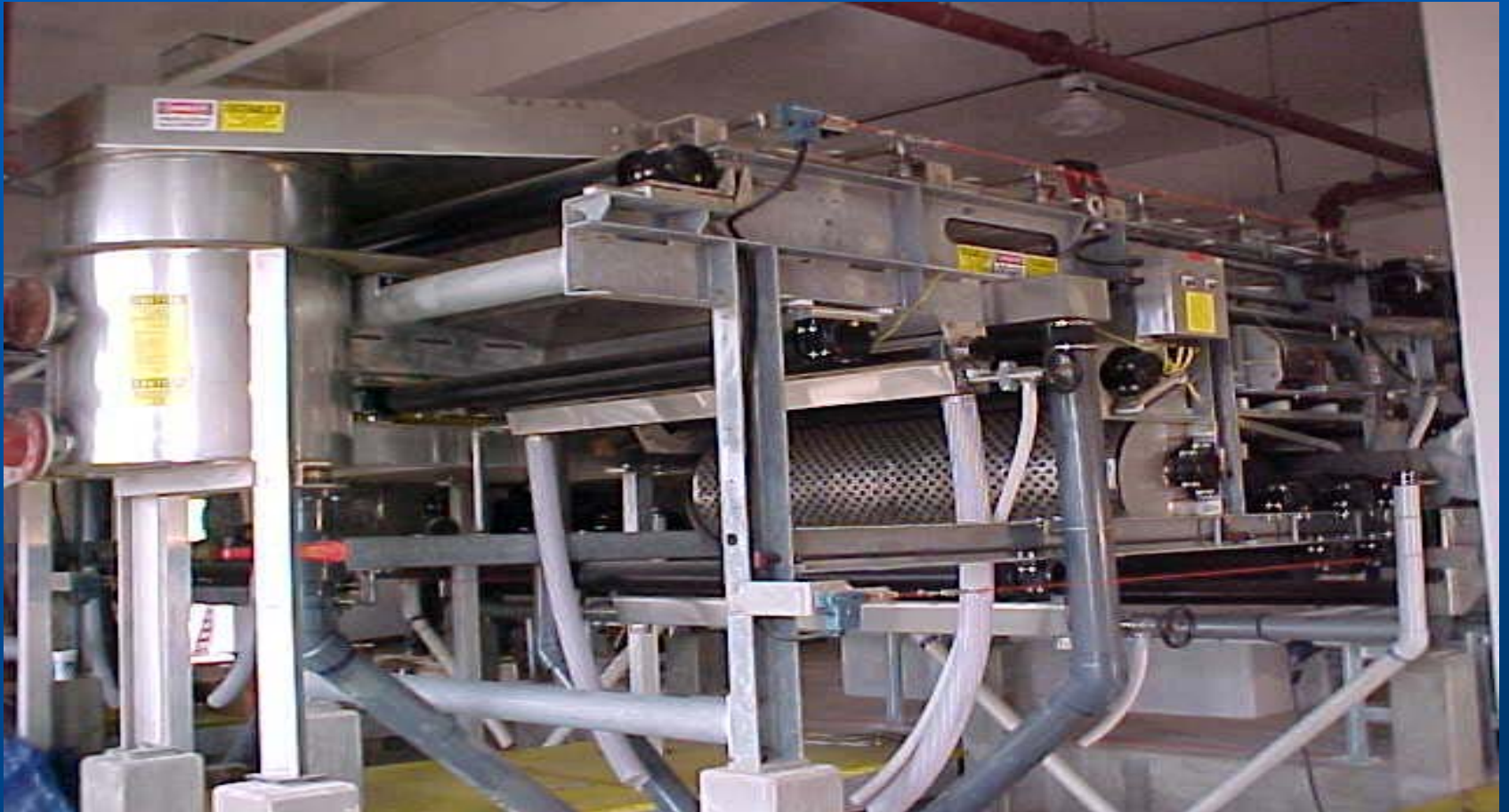
3 New Digester Pumps



Gravity Belt Press Building



2 Gravity Belt Press



Gravity Belt Presses

Use Year Round
Not Weather Dependent
Faster Disposal Time

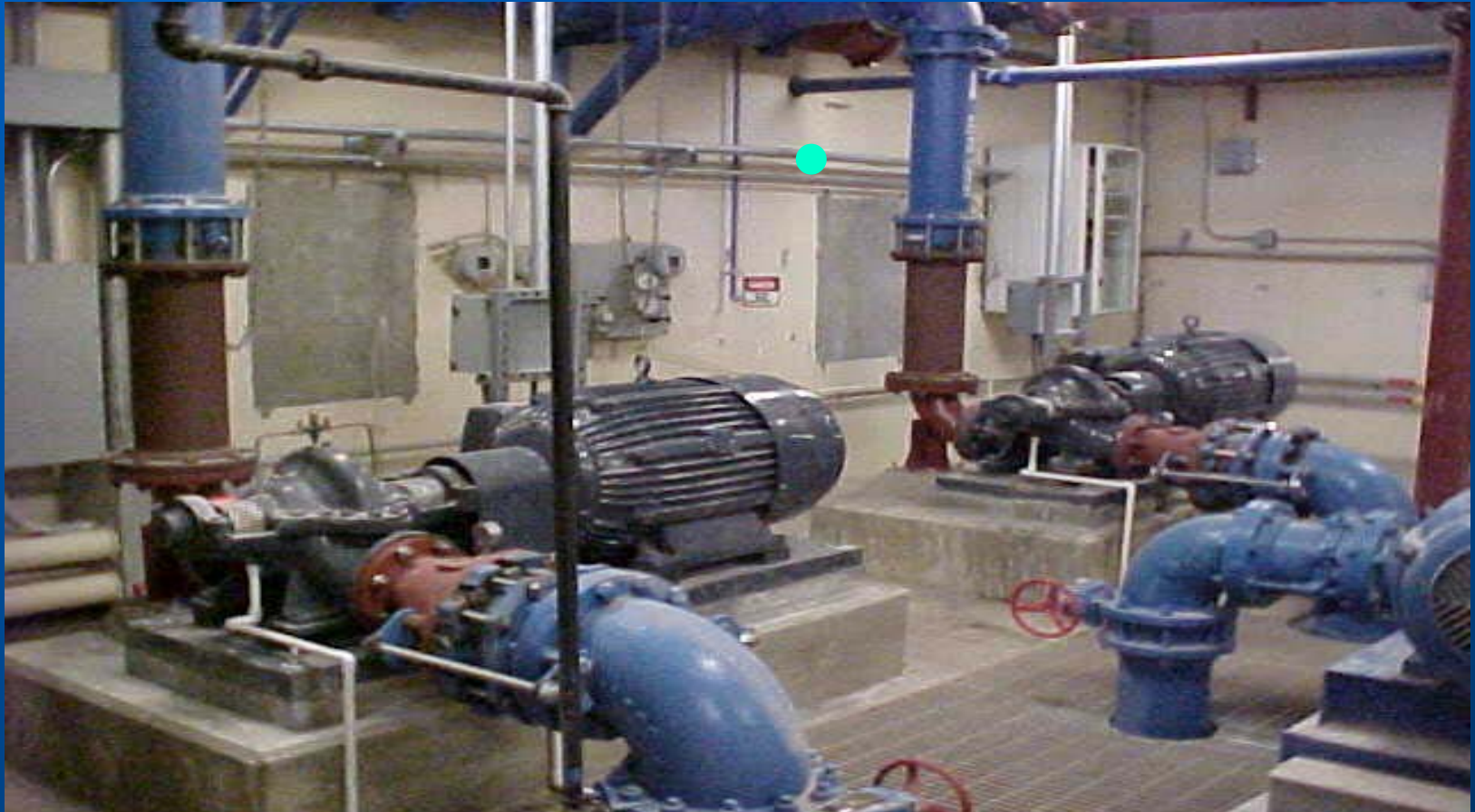
Solids Storage Building



Jockey Pump



2 High Service Water Pumps



New entrance and exit gates



Updated Aerial Photo Needed



2001 Yearly report

THE AVERAGE RESULTS FOR THE YEAR OF 2001 AT THE DILLMAN ROAD WWTP WERE AS FOLLOWS:

FLOW ENTERING PLANT	AVERAGE --- 10.2 M.G.D. MAXIMUM -- 13.5 M.G.D. MINIMUM ---- 7.0 M.G.D.
EFFLUENT BOD REMOVAL	AVERAGE --97.5% MAXIMUM - 99 % MINIMUM --- 97%
TOTAL SUSPENDED SOLIDS	AVERAGE --- 99.3% MAXIMUM --- 99.8% MINIMUM --- 98%
PHOSPHORUS	AVERAGE --- 81% MAXIMUM --- 92%
AMMONIA – NITROGEN	AVERAGE --- 94.5% MAXIMUM ---99.6%